Draft Environmental Assessment

GRUENE ROAD WASTEWATER TREATMENT PLANT FLOOD PROTECTION PROJECT NEW BRAUNFELS, TEXAS

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LIST OF ACRONYMS

CAA Clean Air Act

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CO carbon monoxide CWA Clean Water Act

dB decibels

EA Environmental Assessment

EO Executive Order

EPA Environmental Protection Agency

ESA Endangered Species Act

FEMA Federal Emergency Management Agency

FHBM Flood Hazard Boundary Map
FHWA Federal Highway Administration
FIRM Flood Insurance Rate Map
FPPA Farmland Protection Policy Act

gpm gallons per minute mg/l milligrams per liter msl mean sea level

NAAQS National Ambient Air Quality Standards
NEPA National Environmental Policy Act of 1969

NFIP National Flood Insurance Program NGVD National Geodetic Vertical Datum NHPA National Historic Preservation Act

NO₂ nitrogen dioxide

NRCS Natural Resources Conservation Service NRHP National Register of Historic Places

NWI National Wetland Inventory

 O_3 ozone

OSHA Occupational Safety and Health Administration

Pb lead

PM₁₀ particulate matter less than or equal to 10 microns

RCRA Resource Conservation and Recovery Act

SO₂ sulfur dioxide

TCEQ Texas Commission on Environmental Quality

TxDOT Texas Department of Transportation

THC Texas Historical Commission USACE U.S. Army Corp of Engineers

USGS U.S. Geologic Survey

USFWS U.S. Fish and Wildlife Service

1.0 INTRODUCTION

1.1 Project Authority

On July 4, 2002, a major disaster was declared due to flooding in central Texas that ultimately included 39 counties (FEMA-1425-DR-TX). As a result of damage sustained during the flooding, New Braunfels Utilities has applied for funding under the Public Assistance Program administered by the Federal Emergency Management Agency (FEMA). In accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 93-288, as amended, FEMA is required to review the environmental effects of the proposed action prior to making a funding decision. In accordance with 44 Code of Federal Regulations (CFR) Part 10, FEMA has prepared this environmental assessment to meet the requirements of the National Environmental Policy Act of 1969 and the Council on Environmental Quality's implementing regulations at 40 CFR Parts 1500-1508. The purpose of this environmental assessment is to analyze and assess the potential environmental impacts associated with the proposed action.

1.2 Project Location

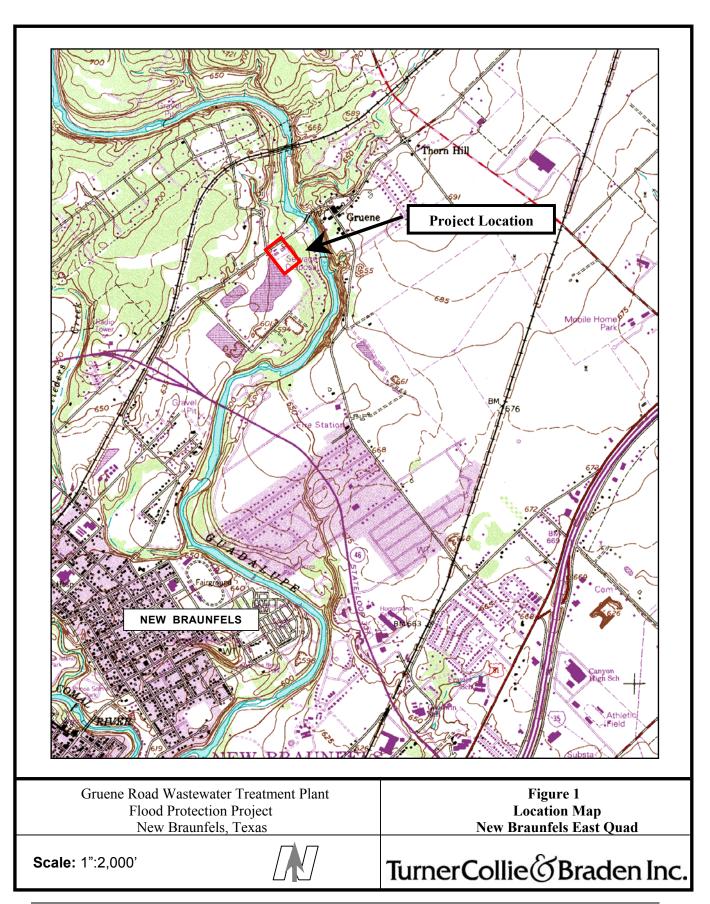
The proposed project is located at the Gruene Road Wastewater Treatment Plant at 1493 Gruene Road within the City of New Braunfels, Texas (*Figure 1* and *Figure 2*). New Braunfels is located in southeastern Comal County approximately 25 miles northeast of San Antonio. The existing facility on the site is a 1.1 million gallon a day wastewater treatment plant owned by New Braunfels Utilities, a publicly owned utility. The project site is five acres in size and located approximately 500 feet west of the Guadalupe River. The Guadalupe River flows from the Texas Hill Country to the Gulf of Mexico, a distance of approximately 250 miles (Texas Almanac 1999).

The existing wastewater treatment plant was constructed in 1978 and expanded in 1990. Elevations at the site range from 621 feet to 628 feet. The site is located within the city limits of New Braunfels. The surrounding area is suburban to semi-rural. Land use to the west and southwest of the facility is vacant (abandoned quarry). Land use to the east is a private business (tube/raft rentals). A subdivision is located to the southeast.

2.0 PURPOSE AND NEED

The purpose of the proposed project is to protect the Gruene Road Wastewater Treatment Plant facility from the floodwaters of the Guadalupe River. Construction of a wall to protect the facility from flooding would reduce the interruption of wastewater treatment operations and minimize the damage from flood events.

The Gruene Road Wastewater Treatment Plant is located partially within the 100-year flood zone as designated by the FEMA Flood Insurance Rate Map (FIRM). In July of 2002, floodwaters covered most of the five acre site and rose to a height of about five feet within the Blower Room building located on the northern corner of the site closest to the river (New Braunfels Utilities 2003). As a result, operations were interrupted for approximately 12 days. During an earlier flood in October 1998, the entire five-acre site was flooded and floodwaters rose to a height of about nine feet in the Blower Room building (New Braunfels Utilities 2003). The proposed project is needed to maintain the operation of the wastewater treatment plant during floods and to prevent health risks and damages to the facility as a result of floodwaters.





Gruene Road Wastewater Treatment Plant Flood Protection Project New Braunfels, Texas Figure 2 Site Map New Braunfels, Texas

Scale: 1" = 720' (approx)



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3.0 ALTERNATIVES

3.1 No Action

The No Action alternative would involve not constructing a flood protection wall or any other structure around the Gruene Road Wastewater Treatment Plant. Consequently, wastewater treatment operations would be subject to interruption and the facility subject to damage during flood events.

3.2 Proposed Action

The proposed action is construction of a flood protection wall to protect the Gruene Road Wastewater Treatment Plant from flood damage. The project would involve construction of a concrete and earthen structure around the perimeter of the five-acre site. The specific design and dimensions of the wall are not yet known but the maximum height is expected to be no more that ten feet and the minimum height would be two to four feet. The project will also include a watertight gate for vehicular access and outlet pipes and/or pumps for draining the site. No other "build" alternatives were considered.

The construction would occur along the perimeter of the existing five-acre site. The work would consist of site preparation (minor grading) and construction of the wall. Fill for the earthen portion of the wall would come from a clean, uncontaminated source. Existing buildings would not be affected and additional property would not be needed.

4.0 AFFECTED ENVIRONMENT AND IMPACTS

4.1 Geology, Seismicity and Soils

The Gruene Road Wastewater Treatment Plant is located along the Guadalupe River floodplain in southeastern Comal County. The general area consists of rolling hills and is suburban to semi-rural in nature. The proposed site is located inside the city limits of New Braunfels.

The project site is located along the Balcones Escarpment, the physiographic boundary separating the Edwards Plateau and Texas Hill Country to the west and the Blackland Prairie to the east. The elevations in the county vary from 600 to 1,600 feet (USDA 1982). The elevation on the project site is approximately 622 feet. Average annual precipitation in Comal County is about 33 inches. The larger amounts of rainfall in the county tend to occur between late spring and early fall (USDA 1982).

The limestone and other carbonate rocks of the Trinity, Fredericksburg and Washita groups dominate the geology in the project area. These stratigraphic units are of varying hardness and are generally more exposed at the surface to the west of the project area. Alluvial sediment overlies the bedrock on the project site.

According to the National Seismic Hazard Mapping Project, there is currently a low probability of seismic activity within the project area (USGS 2002). Since the proposed project is located in an area of low earthquake hazard potential and does not involve constructing any buildings, Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, does not apply.

The *Soil Survey of Comal and Hays Counties* indicates that the project site occurs within the Lewisville-Gruene-Crum soil association. In general, these soils consist of deep to very shallow loamy clayey and gravelly sediments on stream terraces. The mapped soil on the project site is the Oakalla soil, frequently flooded.

The Farmland Protection Policy Act requires federal agencies to evaluate the adverse effects of their activities on prime and unique farmland as well as farmland of statewide and local importance. The Natural Resources Conservation Service (NRCS) is responsible for protecting significant agricultural lands from irreversible conversions that result in the loss of an essential food or environmental resource. Prime farmland is characterized as land with the best physical and chemical characteristics for the production of food, feed, forage, fiber, and oilseed crops. This land is either used for food or fiber crops or is available for those crops, but is not urban, built-up land, or water areas. The Oakalla soil, frequently flooded, is not classified as a prime farmland soil.

Alternative A – No Action: The No Action alternative would have no impacts on the soils or geology of the area.

Alternative B – Construct Flood Protection Wall: Construction of a new flood protection wall at the site would cause some disturbance of geology and soils as part of the site preparation work. Since the site is relatively flat, the grading needed at the site would be minor. Exposed soils could be subject to erosion, therefore, silt fence and/or other storm water quality best management practices would be utilized during construction (see *Section 4.2*). In general, effects to geology and soils would be minor and temporary in nature. The proposed project would not affect the adjacent, abandoned quarry. Because the Oakalla soil, frequently flooded, is not classified as a prime or unique farmland soil, the Farmland Protection Policy Act is not applicable. An AD-1006 (Farmland Conversion Impact Rating) form has been completed for the proposed project and is included in *Appendix B*.

4.2 Water Resources

4.2.1 Surface Water

There are no rivers, creeks or other defined drainages on the project site. Storm water leaves the site as sheet flow and drains to the Guadalupe River approximately 500 feet away. This section of the Guadalupe River is listed as Stream Segment 1812 of the Guadalupe River Basin in the Texas Commission on Environmental Quality's (TCEQ) *State of Texas Water Quality Inventory*. The designated water uses of this segment are contact recreation, exceptional aquatic life, public water supply and aquifer protection.

The TCEQ is required, under Section 303(d) of the Clean Water Act, to identify water bodies for which effluent limitations are not stringent enough to implement water quality standards. The TCEQ also develops a schedule identifying Total Maximum Daily Loads (TMDLs) that will be initiated for priority impaired waters. Based on the TCEQ's 2002 Draft Clean Water Act Section 303 (d) list, Stream Segment 1812 of the Guadalupe River Basin is not listed as a threatened or impaired waterway segment.

Alternative A - No Action: The No Action alternative would have no impacts on the surface water quality of the area.

<u>Alternative B – Construct Flood Protection Wall</u>: Potential impacts to surface waters associated with the construction of the flood protection wall include the potential for minor erosion and sedimentation during construction. Some vegetation clearing and minor grading would be needed as part of the site preparation work. During this period, storm water runoff could carry sediment offsite into receiving waters. A Storm Water Pollution Prevention Plan would be prepared and erosion and sedimentation control measures would be implemented to minimize any detrimental effects to water quality during construction.

Because the project may disturb more than one acre, it may require authorization under the Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit. In order for a project to be authorized under the TPDES General Permit, a Storm Water Pollution Prevention Plan would have to be prepared. The Storm Water Pollution Prevention Plan would include temporary erosion control measures to minimize impacts to water quality during construction. These control measures may include the use of silt fencing, rock berms, hay bales or other suitable means of containment. Temporary erosion control measures (where appropriate) would be maintained during construction. Vegetation would be cleared only as needed. Upon completion of the project, disturbed areas would be re-vegetated.

Any adverse effects to water quality associated with the construction of the flood protection wall would be short term and be minimized by the mitigation measures described above. No long-term effects to water quality are expected as a result of the proposed project.

4.2.2 Waters of the U.S. including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act. Wetlands are identified as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. In addition, Executive Order 11990 (Protection of Wetlands) directs federal agencies to take actions to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands on federal property. A site visit was performed to identify any potential waters of the U.S., including wetlands, on or adjacent to the project site.

<u>Alternative A – No Action</u>: The No Action alternative would have no effect on wetlands or other waters of the U.S. and would not require a Section 404 permit.

Alternative B – Construct Flood Protection Wall: Prior to visiting the project site, a review of the U.S. Geological Survey quadrangle map, the U.S. Fish and Wildlife Service National Wetland Inventory map, and an aerial photo of the site was performed to identify the potential for wetlands and/or other waters of the U.S. This review did not find any potential areas containing waters of the U.S. on the site. A site visit conducted on May 5, 2003 confirmed there are no waters of the U.S. subject to Section 404 permitting on the project site. Waters of the U.S. adjacent to the property include the abandoned quarry to the southwest of the site and the Guadalupe River. These adjacent areas would not be affected by the proposed project. The proposed project would not impact waters

of the U.S. and would not require a Section 404 permit. There are no navigable waters in the area; therefore, Section 10 of the Rivers and Harbors Act of 1899 does not apply.

4.2.3 Floodplains

Floodplains generally refer to 100-year floodplains as set by FEMA and are shown on Flood Insurance Rate Maps or Flood Hazard Boundary Maps for all communities that are members of the National Flood Insurance Program (NFIP). The City of New Braunfels and Comal County are participants in the NFIP.

Executive Order 11988 (Floodplain Management) requires federal agencies to avoid or minimize development in the floodplain except when there are no practicable alternatives. According to the NFIP Flood Insurance Rate Map for New Braunfels (Community-Panel Number 485493-0006-C), the project site is located within the 100-year floodplain.

Alternative A - No Action: The No Action alternative would not result in impacts to the 100-year floodplain.

<u>Alternative B – Construct Flood Protection Wall</u>: The construction of the flood protection wall would take place partially within the designated 100-year floodplain. To comply with Executive Order 11988, Floodplain Management, FEMA is required to follow the procedure outlined in 44 CFR Part 9 to assure that alternatives to the proposed action have been considered. This process, also known as the "Eight Step Planning Process," has been applied to the proposed action and is described in *Appendix D*. For the purposes of this study, there are no practicable alternatives to the proposed action.

No adverse effects to the floodplain are expected as a result of the construction of the flood protection wall. Coordination with the City of New Braunfels floodplain administrator has been performed (see letter in *Appendix B*). The City of New Braunfels floodplain administrator had no objection to the proposed action. The final design of the proposed flood protection wall would undergo review for floodplain and drainage issues through the City of New Braunfels development review process.

4.2.4 Groundwater

The primary source of groundwater in the area is the Edwards Aquifer. The Edwards Aquifer is a porous, limestone aquifer that extends in an arc from north of Austin to west of San Antonio. The aquifer is characterized by high permeability and susceptibility to surface water quality conditions. Where certain projects occur on the recharge zone of the Edwards Aquifer, they are required to comply with the TCEQ's Edwards Aquifer Rules (30 TAC Chapter 213). The recharge zone is defined as that portion of the aquifer where the water bearing units are exposed at the surface and where surface water typically enters the aquifer.

The project site lies on a portion of the Edwards Aquifer designated as the transition zone by the TCEQ. The transition zone is that portion of the aquifer where the water bearing units of the aquifer are not exposed at the surface and is located generally down-gradient from the recharge zone but where wells at the surface can penetrate the aquifer.

<u>Alternative A – No Action</u>: The No Action alternative would have no effect on groundwater.

<u>Alternative B – Construct Flood Protection Wall</u>: The construction of the flood protection wall would not have any substantial effect on the Edwards Aquifer in the area. Because the project occurs on the transition zone of the Edwards Aquifer, compliance with the TCEQ's Edwards Aquifer rules is not required.

4.3 Biological Resources

4.3.1 Flora and Fauna

The project area is located on the extreme eastern edge of the Edwards Plateau vegetative region of Texas, as originally described by Gould (1975) and updated by Hatch et al. (1990). The eastern edge of the Edwards Plateau is identified by the Balcones Escarpment that delineates the east and south boundaries of what is commonly referred to as the Texas Hill Country.

The project site occurs within the Edwards Plateau ecoregion and Live Oak-Ashe Juniper Parks subregion as described by the Texas Parks and Wildlife Department in *The Vegetation Types of Texas*. Commonly associated species of this region include live oak (*Quercus virginiana*), Ashe juniper (*Juniperus ashei*), shin oak (*Quercus sinuata*), cedar elm (*Ulmus crassifolia*), evergreen sumac (*Rhus virens*), escarpment cherry (*Prunus serotina*), saw greenbriar (*Smilax bona-nox*), twistleaf yucca (*Yucca rupicola*), Texas pricklypear, little bluestem, Texas grama, woodsorrel, and netleaf hackberry (*Celtis reticulata*).

Typical fauna in this portion of the Edwards Plateau includes white-tailed deer (*Odocoileus virginianus*), striped skunk (*Mephitis mephitis*), squirrels (*Spermophilus spp.*), nine-banded armadillo (*Dasypus novemcinctus*), raccoon (*Procyon lotor*), various species of bats, and a wide variety of songbirds.

The vegetation on the project site consists primarily of regularly mowed Bermuda grass. Tree species adjacent to the site include netleaf hackberry, live oak, cedar elm and domesticated pecan (*Carya sp.*). Photos showing vegetation on the project site are included in *Appendix A*.

The Fish and Wildlife Coordination Act was enacted to protect fish and wildlife when federal actions result in control or modification of a natural stream or body of water. No streams or other water bodies are located on the project site, therefore, the Fish and Wildlife Coordination Act is not applicable to the proposed action.

Alternative A - No Action: The No Action alternative would have no effect on flora or fauna in the project area.

<u>Alternative B – Construct Flood Protection Wall</u>: The construction of a flood protection wall would result in minimal clearing of vegetation. Because of the suburban nature of the project area, affects to wildlife and habitat would be minimal. Clearing of vegetation would occur only on the perimeter of the five-acre site. In general, the effects to plants and animals are expected to be minimal.

4.3.2 Threatened and Endangered Species

The USFWS lists six species in Comal County as being endangered. These species are the Black-capped vireo (*Vireo atricapillus*), Golden-cheeked warbler (*Dendroica chrysoparia*), fountain darter (*Etheostoma fonticola*), Comal Springs riffle beetle (*Heterelmis comalensis*), Comal Springs dryopid beetle (*Stygoparnus comalensis*), and Peck's cave amphipod (*Stygobromus*(=*Stygonectes*) pecki). In addition to these species, the USFWS lists the least tern (*Sterna antillarum*), whooping crane (*Grus americana*), bald eagle (*Haliaeetus leucocephalus*), and piping plover (*Charadrius melodus*) as threatened or endangered in many or all counties in Texas.

The Endangered Species Act (ESA) of 1973 provides for the protection of all listed threatened and endangered species from take defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Harm is further defined by USFWS to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined by USFWS as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering.

Other than the aquatic species, the black-capped vireo and golden-cheeked warbler are the only non-transient species federally-listed in Comal County. The black-capped vireo's breeding habitat consists of shrub or savannah vegetation with dense growths in the shrub layer from the ground to approximately six feet in height. The golden-cheeked warbler inhabits woodlands containing Ashe juniper in combination with various deciduous species, including oaks, cedar elm, and hackberry. The vegetative community on and adjacent to, the project site is not characteristic of either of these habitats

Table 1
Federally Listed Threatened and Endangered Species in Comal County

Common Name	Status	Comments
Whooping Crane	Endangered	Migratory/Transient species
Least Tern	Endangered	Migratory/Transient species
Bald Eagle	Threatened	Migratory/Transient species
Piping Plover	Threatened	Migratory/Transient species
Golden-cheeked Warbler	Endangered	-
Black-capped Vireo	Endangered	-
Fountain Darter	Endangered	San Marcos and Comal rivers
Comal Springs Riffle Beetle	Endangered	San Marcos and Comal springs
Comal Springs Dryopid Beetle	Endangered	Aquatic species
Peck's Cave Amphipod	Endangered	Aquifer-dwelling species

<u>Alternative A – No Action</u>: The No Action alternative would have no effect on threatened or endangered species.

<u>Alternative B – Construct Flood Protection Wall</u>: The project site does not contain habitat for any of the listed species described above. The USFWS was contacted by letter regarding the potential for endangered species to be impacted by the proposed project. According to the USFWS, the project site does not contain habitat for any of the listed species described above; therefore; the construction of the flood protection wall would not affect any threatened or endangered species or their habitat (letter attached in *Appendix B*).

4.4 Air Quality

The Clean Air Act requires that states adopt ambient air quality standards. The standards have been established in order to protect the public from potentially harmful amounts of pollutants. The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six air pollutants. These pollutants include sulfur dioxide (SO₂), particulate matter with a diameter less than or equal to 10 micrometers (PM₁₀), carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and lead. The EPA has designated specific areas as NAAQS attainment or non-attainment areas. Non-attainment areas are any areas that do not meet (or that contribute to ambient air quality in a nearby area that does not meet) the quality standard for a pollutant. Attainment areas are any areas that meet ambient air quality standards. According to the TCEQ, Comal County is currently designated as "in-attainment" for these standards.

<u>Alternative A – No Action</u>: The No Action alternative would have no effect on air quality.

<u>Alternative B – Construct Flood Protection Wall</u>: Pollutant emissions from construction equipment may result in minor effects to air quality in the area immediately surrounding the construction activity. Vehicular exhaust emissions would be produced by the operation of diesel engines and other construction equipment. These effects would be localized and of short duration. The contractor would be required to keep all equipment in good working order to minimize air pollution.

4.5 Transportation

The project site is located along Gruene Road approximately two and a half miles north of the central business district of New Braunfels. Gruene Road is a two-lane, city-maintained roadway and is the main road between downtown New Braunfels and the community of Gruene.

<u>Alternative A – No Action</u>: The No Action alternative would have no effect on transportation in the area.

<u>Alternative B – Construct Flood Protection Wall</u>: The proposed action is not expected to have an affect on transportation along Gruene Road or other local roadways.

4.6 Noise

Noise is generally defined as unwanted sound. The closest noise receptor is a residence approximately 200 feet southeast of the project site. Noise levels within and adjacent to the project

area would increase during the proposed construction activities as a result of construction equipment. The noise levels generated would be limited to workday daylight hours for the duration of the work. There are no local noise ordinances that would apply to the proposed project.

<u>Alternative A – No Action</u>: The No Action alternative would not result in impacts to noise receptors in the area.

<u>Alternative B – Construct Flood Protection Wall</u>: The proposed action would result in a slight increase in noise during the construction of the facility. The increase in noise is expected to be minor and short term.

4.7 Cultural Resources

A search of the Texas Historic Sites Atlas found no listings of National Register properties on or adjacent to the project site. The project site has no structures on it. No historical markers were noted in the area during the site visit. Coordination with Texas Historical Commission has been initiated to provide information regarding potential archeological properties and National Register eligibility.

<u>Alternative A – No Action</u>: The No Action alternative would have no effect on cultural resources in the area.

Alternative B – Construct Flood Protection Wall: The Texas Historical Commission was contacted by letter regarding the potential for archeological or historic resources to be impacted by the proposed project. According to the Texas Historical Commission, construction of the flood protection wall at the proposed location would not affect any known archeological or historic resources in the area (letter attached in Appendix B). If artifacts or other potential historic materials are discovered during construction, work will be suspended and FEMA and the State Historic Preservation Officer will be contracted.

4.8 Socioeconomic

The City of New Braunfels, population 38,400, is the county seat of Comal County (New Braunfels Chamber of Commerce 2003). According to the 2000 census, Comal County has a population of 78,021 and a per capita income of \$19,393 (U.S. Census Bureau 2000). The primary industries in Comal County are manufacturing, tourism and government/services (Texas Almanac 1999).

<u>Alternative A – No Action</u>: The No Action alternative would not have an affect on the socioeconomic conditions of either the City of New Braunfels or Comal County.

<u>Alternative B – Construct Flood Protection Wall</u>: Construction of a flood protection wall around the Gruene Road Wastewater Treatment Plant would facilitate and/or support economic growth by providing more reliable wastewater treatment facility. In addition, the construction of the new facility would be expected to create new jobs in the short term.

4.9 Environmental Justice

Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," mandates that federal agencies identify and address, as

appropriate, disproportionately high and adverse human health or environmental effects of programs on minority and low-income populations. This Executive Order also tasks federal agencies with ensuring that public notifications regarding environmental issues are concise, understandable, and readily accessible. Socioeconomic and demographic data were studied to determine if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project.

The 2000 Census lists 89.1% Comal County's residents as white; of these, 74.6 % were white persons not of Hispanic/Latino origin. Residents of Hispanic/Latino origin comprised 22.6 % of the county's population. African Americans, American Indian, Alaska Native persons, and Asian persons comprised 3% of the total population in this county. Median household income was \$33,448 (U.S. Census Bureau 2000).

<u>Alternative A – No Action</u>: The No Action alternative would not have disproportionate impacts on minority or low-income populations in the City of New Braunfels or in Comal County.

<u>Alternative B – Construct Flood Protection Wall</u>: Construction of the flood protection wall would not involve any relocations or have an adverse or disproportionate impact on minority or low-income populations. The benefits of a flood protection wall are expected to be proportional to all residents in the area.

4.10 Safety

Safety and security issues that were considered in this environmental assessment include the health and safety of area residents, the public at-large, and the protection of personnel involved in activities related to the implementation of the proposed project.

<u>Alternative A – No Action</u>: The No Action alternative would not affect the health and safety of residents in the area.

<u>Alternative B – Construct Flood Protection Wall</u>: Construction of the flood protection wall would allow New Braunfels Utilities continue operation of the Gruene Road Wastewater Treatment Plant even during periods of high water that would otherwise inundate the facility. In addition, the harmful effects of contaminated floodwaters would be averted by protecting the facility during periods of high water. The effects to the health and safety of residents in the area are expected to be positive.

4.11 Hazardous Materials

Hazardous wastes, as defined by the Resource Conservation and Recovery Act (RCRA), are defined as "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed." Hazardous materials and wastes are regulated in Texas by a combination of federal laws and state laws. Federal regulations governing the assessment and disposal of hazardous wastes include RCRA, the RCRA Hazardous and Solid Waste Amendments, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Solid Waste Act (SWA), and Toxic Substances Control Act (TSCA).

Visual observation of the project area did not reveal obvious existing or potential hazardous materials, substances, or conditions. No drums or other sources of potential hazardous materials were observed in the project area. No indications of pipelines crossing the project area were noted in the field or on the USGS topographic map reviewed for this project.

Additionally, a review of regulatory environmental databases was conducted via the Internet from federal and state agencies. The following is a list of the federal and state databases reviewed for this project: Environmental Protection Agency (EPA), National Priorities List (NPL), EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List, EPA Resource Conservation and Recovery Information System (RCRIS) List, Texas Commission on Environmental Quality (TCEQ) Superfund Registry, TCEQ Leaking Petroleum Storage Tank (LPST) List, and TCEQ Petroleum Storage Tank (PST) List. The databases were searched by zip code and by the municipality of New Braunfels, Texas. No facilities or properties in the project area were listed on the databases reviewed.

<u>Alternative A – No Action</u>: The No Action alternative would not disturb any hazardous materials or create any potential hazard to human health.

<u>Alternative B – Construct Flood Protection Wall</u>: Construction of the flood protection wall would not disturb any hazardous materials or create any potential hazard to human health. If hazardous constituents are unexpectedly encountered in the project area during the proposed construction operations, appropriate measures for the proper assessment, remediation and management of the contamination would be initiated in accordance with applicable federal, state, and local regulations. The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area.

5.0 PUBLIC INVOLVMENT

The public would be invited to comment on the proposed action. A legal notice would be posted in a local newspaper, The Herald-Zeitung, and this Draft Environmental Assessment will be made available for review for a period of 30 days.

6.0 AGENCY COORDINATION AND PERMITS

As part of the development of this Environmental Assessment, state and federal resource protection agencies were contacted. A TCEQ TPDES permit may be needed, otherwise, it is anticipated that no permits or approvals would be needed from any other regulatory agencies. The following agencies have been contacted and asked to comment on the proposed project:

- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- Texas Commission on Environmental Quality (TCEQ)
- Texas Parks and Wildlife Department (TPWD)
- Texas Historical Commission
- Floodplain Administrator, Comal County
- Floodplain Administrator, City of New Braunfels

7.0 CONCLUSION

The findings of this Environmental Assessment conclude that the proposed construction of a flood protection wall around the Gruene Road Wastewater Treatment Plant would result in no significant environmental impacts to the human or natural environment; therefore, the proposed action meets the requirements of a Finding of No Significant Impacts (FONSI) under NEPA and the preparation of an Environmental Impact Statement (EIS) will not be required.

8.0 REFERENCES

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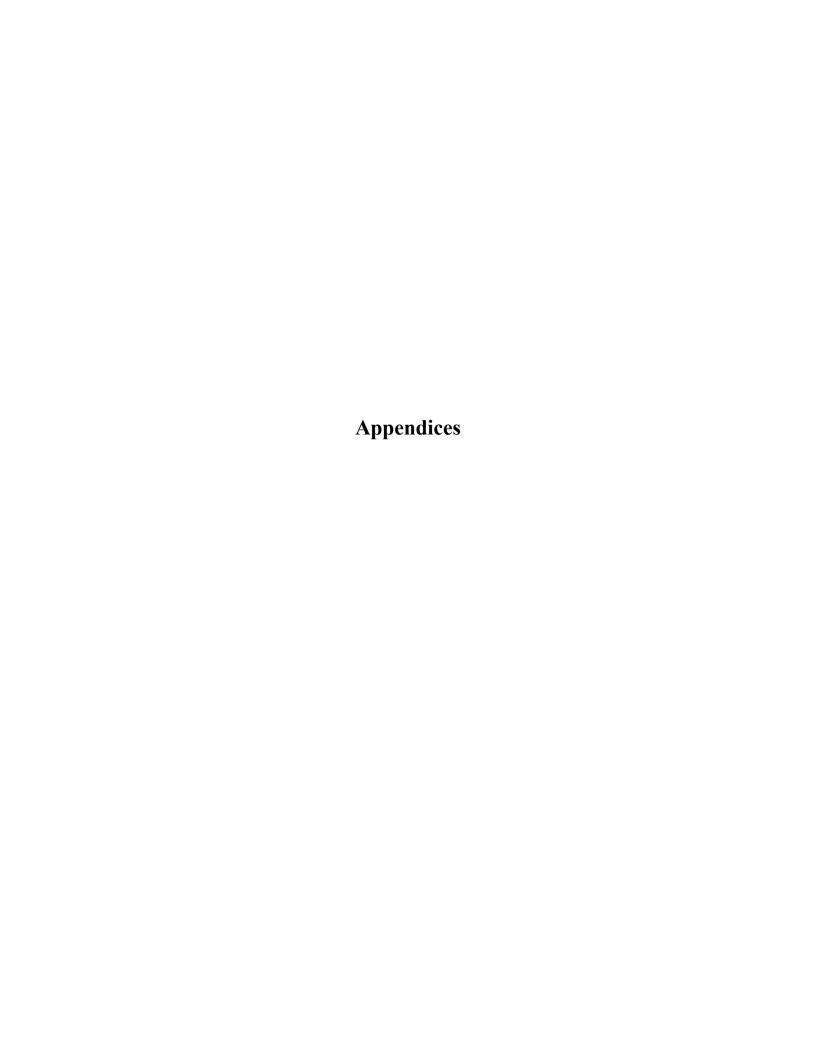
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9.0 LIST OF PREPARERS

Project Manager and Principal Investigator:

Carlos Swonke

Sr. Project Manager Turner Collie & Braden Inc. Austin, Texas



Appendix A Site Photos [photos not available in PDF format]

Appendix B Agency Correspondence [letters not available in PDF format]

Appendix C Public Notice

Federal Emergency Management Agency PUBLIC NOTICE

Notice of Availability of the Draft Environmental Assessment for the Gruene Road Wastewater Treatment Plant Flood Protection Project New Braunfels, Texas FEMA-DR-1425-TX.

New Braunfels Utilities, a publicly-owned utility, has applied to the Federal Emergency Management Agency (FEMA) for assistance with the construction of a flood barrier wall to protect the Gruene Road Wastewater Treatment Plant from periodic flooding. In accordance with the National Environmental Policy Act of 1969, the CEQ regulations implementing NEPA (40 CFR Parts 1500-1508), the National Historic Preservation Act, and the implementing regulations of FEMA (44 CFR Part 9 and 10), an Environmental Assessment (EA) is being prepared to assess the potential impacts of the proposed action on the human and natural environment.

The proposed action is located in the FEMA-designated 100-year floodplain. Because of the project's location in the floodplain and in accordance with Executive Order 11988, an evaluation was performed to identify other practicable alternatives outside the floodplain. No other practicable alternatives to construction of the project in the floodplain were identified.

The EA evaluates alternatives that provide for compliance with applicable environmental laws. The alternatives to be evaluated include (1) No Action; (2) The Proposed Action, the construction of a flood protection wall around the wastewater treatment plant site.

The draft Environmental Assessment is available for review between October 15th and November 13, 2003, at the New Braunfels Public Library located at 700 East Common Street and at the offices of New Braunfels Utilities located at 263 East Main Plaza, New Braunfels, Texas, during normal business hours. The draft Environmental Assessment is also available for review online at the FEMA website http://www.fema.gov/ehp/docs.

Written comments regarding this proposed project should be mailed to Carlos Swonke, Turner Collie & Braden Inc., 400 West 15th Street, Suite 500, Austin, TX 78701. Comments should be received no later than 5:00 p.m. on November 13, 2003.

Appendix D Floodplain Planning Process

Floodplain Planning Process for the Proposed Gruene Road Wastewater Treatment Plant Flood Mitigation Project -Summary Report

The purpose of this discussion is to document the decision-making process used to comply with Executive Order 11988, Floodplain Management, and Executive Order 11990, Protection of Wetlands. Procedures to comply with these Executive Orders are outlined in 44 CFR Part 9.

Eight Step Planning Process (44 CFR §9.6)

Step 1. Determine whether the proposed action is located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions); and whether it has the potential to affect or be affected by a floodplain or wetland.

The project site is within a 100-year floodplain. According to the National Flood Insurance Program's Flood Insurance Rate Map for the City of New Braunfels (Community-Panel Number 485493-0006-C), the project site is located primarily within an area designated as Zone B and partially within Zone A10. A figure showing the project location is attached. Zone B designates areas between the limits of the 100-year and 500-year flood or areas within the 100-year floodplain subject to inundation with average depths less than one foot. Zone A10 designates areas within the 100-year floodplain. The project site is not located in, nor will the project affect, any wetlands.

Step 2. Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process.

The public will be notified and will be given a chance to comment on the project through the public notice process for the environmental assessment. A notice will be posted in a local newspaper announcing the availability of the environmental assessment and the location of the project within the 100-year floodplain. The environmental assessment will be made available at a local library and at the offices of New Braunfels Utilities. Public comment on the project will be accepted for 30 days after the notice.

Step 3. Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions and the "no action" option). If a practicable alternative exists outside the floodplain or wetland FEMA must locate the action at the alternative site.

Because the intent of the project is protection of the existing facility, other locations for the proposed action outside the floodplain are not practical and were not evaluated. The No Action alternative would involve not constructing a flood protection wall or any other structure around the Gruene Road Wastewater Treatment Plant. Consequently, wastewater treatment operations would be subject to interruption and the facility subject to damage during flood events. The No Action alternative would not meet the project purpose of protecting the existing facility from flood damage.

Step 4. Identify the potential direct and indirect impacts associated with the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action.

The potential effects of the proposed action have been evaluated in the environmental assessment. No significant effects to the human or natural environment are expected, nor are any adverse effects to floodplain expected. Preliminary review by the City of New Braunfels floodplain administrator resulted in no objection to the proposed action.

Step 5. Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands.

As discussed in Step 4, no adverse impacts to the floodplain are expected and no wetlands are present in the project area.

Step 6. Reevaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others, and its potential to disrupt floodplain and wetland values and second, if alternatives preliminarily rejected at Step 3 are practicable in light of the information gained in Steps 4 and 5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location.

Based on the reevaluation, the proposed action is still practicable based on the minimal exposure to flood hazards and the potential disruption to the floodplain.

Step 7. Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative.

As part of the public notice for the Draft Environmental Assessment, a statement will be included to address the decision to locate the project in the floodplain. The statement will appear, as follows, in the public notice to be advertised in the New Braunfels Herald-Zeitung.

The proposed action is located in the FEMA-designated 100-year floodplain. Because of the project's location in the floodplain and in accordance with Executive Order 11988, an evaluation was performed to identify other practicable alternatives outside the floodplain. No other practicable alternatives to construction of the project in the floodplain were identified.

Step 8. Review the implementation and post-implementation phases of the proposed action to ensure that the requirements are fully implemented.

The commitment to implement the requirements of this process will be incorporated into the Finding of No Significant Impact of the proposed action as part of the NEPA process.

